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Financial incentives for doctors

Have their place but need to be evaluated and used to promote appropriate goals

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George Bernard Shaw put it well. "That any sane nation, having observed that you could provide for the supply of bread by giving bakers a pecuniary interest in baking for you, should go on to give a surgeon a pecuniary interest in cutting off your leg, is enough to make one despair…"[1] The problem, according to Shaw, was that the profit motive and doctors' entrepreneurialism create the wrong incentives for good medical practice. The creation of the NHS solved the problem of perverse incentives. Or did it?

Certainly the NHS eliminates the need for practitioners to perform excessive medical procedures to achieve economic security. But all payment systems create incentives. They differ in strength, effect, and the activities they encourage. The NHS pays general practitioners in part by capitation to reward doctors who serve more patients. Since its creation the NHS has also provided distinction awards—salary premiums for a select group of practitioners—as a strategy to recruit and retain doctors who might otherwise choose careers outside the NHS, where they are compensated better. Critics have attacked distinction awards, arguing that the choice of doctors receiving awards reflects racial and sex bias (p 1347).[2] However, the larger issue is what part, if any, should financial incentives play in the practice of medicine. Are incentives desirable? Should some incentives be encouraged and others avoided?

The use of incentives for doctors has two main problems. Firstly, when society uses incentives to promote changes in clinical behaviour, it sends a signal that doctors should consider their self interest when making medical decisions. That may lead to better practice in the short run. However, calling forth the self interest of doctors compromises a patient centred ethos that is central to good medical practice. No compensation system will produce the results we want if it undermines the ethos that is necessary for professionalism. If the behaviour of doctors is motivated primarily by self interest we will need to monitor their behaviour carefully and adjust incentives precisely. A Nobel laureate in economics, Kenneth Arrow, recognised this and argued that there are limits to market incentives promoting desirable conduct and ethical codes are therefore important ways of promoting good conduct.[3]

Furthermore, many incentives for doctors create or exacerbate doctors' conflicts of interest, which compromise doctors' loyalty to patients and their exercising independent judgment.[4 5] Traditional medical ethics holds that doctors should act in the interest of patients when making clinical decisions, not their own financial interest or that of their healthcare organisation. Doctors are also supposed to place the interests of their patients first, not those of society or third parties. However, many financial incentives reward doctors for behaviour that is not necessarily in their patients' interest. Paying a fee for service, Shaw explained, encourages provision of services whether or not they are beneficial. Many American managed care organisations use risk sharing incentives, which make doctors bear financial risk for the volume of services their patients use.[6] Risk sharing makes doctors insurers as well as providers and gives them an interest in reducing services or dumping severely ill patients on to other practices.

Private firms also create conflicts of interest by using incentives to encourage doctors to prescribe, refer patients, or practise medicine in a way that furthers the firm's interests.[7] For example, in the United States many magnetic resonance imaging centres and other freestanding medical facilities seek out doctors as limited partners with no role in management. This kind of ownership by doctors encourages doctors to refer their patients to these facilities, to share the profits that their referrals generate. Medical suppliers—such as pharmaceutical firms and manufacturers of medical devices—use financial ties to encourage doctors to prescribe their products. Suppliers pay doctors as consultants, to promote their products through public speaking and to serve on advisory boards. They also sponsor doctors' clinical research, their travel to medical meetings and lodging, and provide meals, gifts, and entertainment.[8 9]

None the less, eliminating all incentives—the implicit and indirect as well as the explicit—is not possible. Nor would it be desirable. Incentives are a powerful management tool, which can be used to promote patients' welfare and improve the performance of a healthcare system. Used properly, an incentive to retain leading practitioners in the NHS makes sense. However, that does not mean that the current incentives used to do so are the right ones or that the distinction award system is properly implemented.

The challenge for health policy is to promote organisational norms that encourage good medicine. Incentives for doctors have their place when used to

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promote appropriate goals such as furthering high quality medicine, patient centred care, and efficient use of resources.[10 11] The difficulty is to avoid or minimise the perverse side effects of incentives. That goal requires careful use of incentives, evaluation of their effect, and a fair dose of scepticism. Health policy makers in much of the world today embrace uncritically the use of incentives for doctors, ignoring their problems and risks. Instead they should treat incentives like drugs—a powerful product that can be beneficial but also dangerous. Society should control the use of incentives for doctors carefully to ensure that they are safe as well as effective in the way they are used.

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Competing interests: None declared.

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Scars and keloids

Several treatments are used, but the evidence base is lacking

The reparative response of a fetus to injury is regeneration of tissue without scar. However, in children and adults the inevitable response to injury is scar formation, which in skin causes disfigurement and may result in restriction of motion. In other organs excessive scarring is responsible for pulmonary fibrosis, cirrhosis, end stage glomerulonephritis, and systemic scleroderma. The molecular signals that cause an active wound healing process to turn off in the process of scar maturation are unknown. The clinical treatment of scars has therefore been largely empirical. Multiple treatments have been proposed, often backed by anecdotal evidence only. Some treatments, such as topical vitamin E, have been widely promulgated as effective in the popular press in the United States,[1] whereas others have been marketed directly to the consumer despite a lack of evidence.[2] So how should we treat excessive scarring given the poverty of evidence?

The first step in minimising scarring should be attention to the early care of wounds, and the following recommendations are based on general principles of wound healing. The goal with minor wounds such as abrasions is to achieve rapid epithelisation by moist healing with ointment or semiocclusive dressings. When epithelisation is delayed beyond 10-4 days the incidence of hypertrophic scarring goes up dramatically.[3] Surgical closure of an open wound should take into account the tension on the wound. Wounds subjected to tension due to motion, body location, or loss of tissue (after excision of a lesion) are at increased risk of scar hypertrophy and spreading. Appropriate splinting of the tissue with permanent intradermal sutures should be considered. A useful technique is a subcuticular closure with a polyprolene suture that can be left in place for six months. Permanent clear nylon sutures placed in the deep dermis are also efficacious (personal experience). Most absorbable sutures, which do not splint the wound sufficiently long to prevent widening or hypertrophy of scar.[4]

Recently, an international group of clinicians reviewed the available literature for an evidence based analysis of useful treatments for cutaneous scarring and, where evidence was lacking, a consensus recommendation of useful approaches.[3] For the prevention of hypertrophic scarring and optimal scar formation after laceration or surgical incision, a semiocclusive tape or ointment, applied for one to four weeks, has been accepted as useful, although the only evidence is from successful clinical experience.[3] The underlying mechanism has not been well elucidated, and the evidence is circumstantial. Epithelisation over an open wound induces apoptosis and resolution of inflammation, and in co-culture in vitro experiments signals from overlying keratinocytes resulted in reduced synthesis of collagen by the underlying fibroblasts.[5 6] In addition, hydration of the keratinocytes (similar to hydration of epithelium by a semiocclusive tape) results in cytokine signalling from the keratinocytes, which influences fibroblasts in co-culture experiments.[6]

In patients with scars showing early signs (erythema and scar elevation) of evolving into hypertrophic scars, or for patients at higher risk of developing hypertrophic scars (patients who are younger than 40 years, have a previous history of hypertrophic scars, or are at increased risk because their racial background), several prospective randomised studies support the efficacy of silicone gel sheeting in flattening scars and reducing their stiffness.[3] Although the mechanism of action has not been proved, multiple studies have by elimination assumed that its action is the result of its semiocclusive properties.[3 6 7] In recent years multiple silicone gel

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